

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: US National Phase of PCT/JP2005/012728
Filing Date: (International) July 5, 2005
Applicant: Masayuki IKEDA
Group Art Unit: Not yet assigned
Examiner: Not yet assigned
Title: ELECTRONIC APPARATUS AND WIRELESS
COMMUNICATION TERMINAL
Attorney Docket: 9319S-001760/US/NP

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. **LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION**

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. **COPIES**

A. ☒ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

B. ☐ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were

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previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

C. ☒ This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A. ☐ Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B. ☒ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1. ☒ See the attached foreign patent office communication regarding a related foreign application in:

International Search Report for PCT/JP2005/012728, mailed 10/17/2005; Written Opinion of ISA/EP, mailed 10/17/2005, and Japanese Search Report for JP 2004-367203, mailed May 24, 2006

2. ☒ English translations are provided as follows:

As indicated on attached Form 1449.

3. ☐ Other:

C. ☒ The following additional information is provided for the Examiner's consideration:

Document 5 in "Other Documents" is discussed on pages 3 and 6 of the Specification. Document 6 is discussed on page 28 of the Specification.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. ☐ The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By

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bringing this(these) application(s) to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.Filing DateInventor(s)V. THIS IDS IS BEING FILED UNDERA. ☐ 37 C.F.R. § 1.97(b): (check only one box)

1. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. ☒ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. ☐ before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. ☐ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. ☐ 37 C.F.R. § 1.97(c): (check only one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. ☐ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

2. ☐ See the certification below. No fee is required.

C. ☐ 37 C.F.R. § 1.97(d):

after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. ☐ See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

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VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. ☐ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or

B. ☐ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. ☐ some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 C.F.R. 1.704(d)

The undersigned hereby states that:

☐ each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box, if applicable)

A. ☐ A check in the amount of \$180.00 is enclosed for the above-identified fee.

B. ☐ Please charge Deposit Account No. 50-3213 in the amount of \$180.00 for the above-identified fee.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 50-3213 (Epson R&D).

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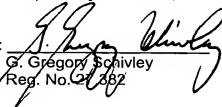
The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-3213 (Epson R&D).

Respectfully submitted,

Dated: August 31, 2006

By:


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FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE
 INFORMATION DISCLOSURE CITATION**
 (Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET NO.

SERIAL NO.

9319S-001760/US/NP

APPLICANT

Masayuki IKEDA

FILING DATE

31 August 2006

GROUP

2618

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	/HN/	6,640,113 B1	10-28-2003	Shim et al		
2.		6,424,820 B1	07-23-2002	Burdick et al		
3.		2001/018,351 A1	08-30-2001	Hino et al		
4.		2005/192,048 A1	09-01-2005	Bridgell		
5.	↓	6,895,255 B1	05-17-2005	Bridgell		

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.	/HN/	1128644 A	07-29-2002	EP		N/A	
2.		1199842 A	04-24-2002	EP		N/A	
3.		08-046416	02-16-1996	JP		Abst.	
1.		2004-343265	12-02-2004	JP		Abst.	
5.		2003-218315	07-31-2003	JP		Abst.	
6.		10-256478	09-25-1998	JP		Abst.	
7.		04-025046	01-28-1992	JP		Abst.	
8.		2000-012406	01-14-2000	JP		Abst.	
9.		2000-068904	03-03-2000	JP		Abst.	
10.		2003-101320	04-04-2003	JP		Abst.	
11.	↓	2000-124406	04-28-2000	JP		Abst.	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	/HN/	Search Report for PCT/JP2005/012728, ISA/EP, Rijswijk, mailed October 17, 2005
2.	/HN/	Written Opinion of the International Searching Authority for PCT/JP2005/012728, PCT/ISA/237 (in English), ISA/EP, Rijswijk, mailed October 17, 2005,

Examiner:

/Hai Nguyen/ (02/06/2008)

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of the form with next communication to applicant.

/HN/

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**PATENT AND TRADEMARK OFFICE
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(Use several sheets if necessary)

Sheet 2 of 2

ATTORNEY DOCKET NO.	SERIAL NO.
9319S-001760/US/NP	
APPLICANT	
Masayuki IKEDA	
FILING DATE	GROUP
31 August 2006	2618

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.):

4.	/HN/	CHU, L. J., "Physical Limitations of Omni-Directional Antennas," Journal of Applied Physics, Vol. 19, Dec., 1948, pp. 1163-1175.
5.	/HN/	NIKKEI MICRODEVICE, December, 2003, p. 161. *
6.	/HN/	MCLEAN, J.S., "A Re-Examination of the Fundamental Limits on the Radiation Q of Electrically Small Antennas," IEEE Trans. Antennas Propagation, Vol.44, pp. 672-676, 1996.*

* Note: To be supplied at a later date.

Best Available Copy

Examiner:

/Hai Nguyen/ (02/06/2008) Date Considered:

EXAMINER: Please initial citation considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL CITATIONS CONSIDERED EXCEPT WHERE LINED THROUGH: /HN/